**My Guide to the Universe – Final Project**

Rather than a unit test for our Sky Science Unit, we will be creating our own “Guide to the Universe.” This is an individual project that will require work outside of class time to complete.

You will have three full class periods and one additional week of your own time to complete this assignment.

**This assignment is due on Friday, May 13.**

* You will be creating an informational book that will contain important information and diagrams to help others understand the universe.
* Your book will be completed to the **best of your ability** and all information **must be typed and edited** for proper spelling and punctuation.
* Pictures and diagrams can be computer generated or hand drawn. Hand drawn images must be neat and computer generated images MUST include the exact web address that they came from.
* **All** **written work MUST be in your own words** and all websites and books that you used to collect information from must be included in your bibliography.
* **Use the checklist AND rubric** to ensure that you have included everything that you need for this assignment.
* The final product must be stapled or bound together as a book, complete with a title page.
* **Once again, this project must be an example of your best work.**

**What Needs to be Included in my Guide to the Universe?**

* Title Page with Your EXACT Address in the Universe
  + Call the project “(*Your Name)*’s Guide to the Universe”
  + See the guide on the attached page.
* Glossary of Key Terms with Definitions (You may find it helpful to include pictures for some terms)
  + See the list of terms on the attached page.
* Informational Page on Ursa Major, Cassiopeia and Ursa Minor:
  + Include the following fact, “All three are circumpolar constellations, meaning they circle the North Star and can be seen year round.”
  + You MUST include a labeled diagram of how Ursa Major (The Big Dipper) changes positions in the sky depending on the time of year.
* Informational Page on the Sun:
  + Explain how a shadow and the Sun are related.
  + What time of the day does the Sun cast a very short shadow?
  + Explain why the shadow is not in the same place or same length every day.
  + How can we predict the location of the Sun by viewing the position of the shadow?
* Informational Page on The Reasons for the Seasons
  + How does the tilt of the Earth and the rotation around the Sun cause the changes of the seasons?
  + Include pictures or diagrams to explain the reasons for the seasons.
* Informational Page on The Order of the Planets and their Sizes:
  + Include a labeled picture including the size of each planet.
  + Include a list of planets that are smaller than Earth **and** list of planets that are larger.
* Phases of the Moon Calendar: This is the HAND DRAWN calendar that you have been completing at home.
  + **It must be labeled** with the phases of the moon. Any missing days must be filled in.
* Bill Nye the Science Guy – Planets: Movie Worksheet
  + (This is already completed)
* Planets Booklet:
  + (This is already completed)
* Pick at least one question from the Wiki Discussion at the beginning of the unit to answer.
  + Include a well-written answer and any pictures or diagrams that would be helpful.
  + Would you agree that there are many more questions than answers and our knowledge of space is still limited?
* Bibliography
  + Every single website and/or book that you use MUST be listed here.
  + If you found a picture on Google Images, you must list the exact website that the picture came from and not just “Google Images.”

**Exact Address in the Universe Template**

Student’s Name

Street Address

City, Province

Canada (postal code)

North America

Earth

Solar System

Orion Arm

Milky Way Galaxy

Local Group

Universe

**Glossary of Key Terms:**

|  |  |
| --- | --- |
| Asteroids  Astronomy  Atmosphere  Axis  Black Hole  Comet  Constellations  Crater  Emit  Eclipse (Solar and Lunar)  Equator  Galaxy | Hemispheres  Meteor  Meteorite  Meteoroids  Orbit  Satellite  Solar Noon  Solar System  Star  Sun  Sundial  Universe |